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9 Attorneys for BRIAN WAYNE WENDT

10 IN THE UNITED STATES DISTRICT COURT  
11 FOR THE NORTHERN DISTRICT OF CALIFORNIA  
12 SAN FRANCISCO DIVISION

13 UNITED STATES OF AMERICA,

14 Plaintiff,

15 vs.

16 JONATHAN JOSEPH NELSON, et al.,

17 Defendants.

**Case No. CR-17-00533-EMC**

**WENDT REPLY TO OPPOSITION  
[DOC 1489] TO MOTION [DOC 1444]  
TO EXCLUDE OR LIMIT  
TESTIMONY OF FBI OR OTHER  
EXPERT WITNESSES TESTIFYING  
ABOUT CELL PHONE  
COMMUNICATIONS AND  
LOCATIONS BASED ON  
HISTORICAL CELL CALL DETAIL  
RECORDS AND PROPRIETARY  
MAPPING SOFTWARE [DAUBERT  
AND F.R.E. 403]; MOTION FOR  
EVIDENTIARY HEARING  
[EXHIBITS APPENDED]**

**Date: March 2, 2021**

**Time: 9:00AM**

**Dept: The Honorable Edward M. Chen  
District Judge**

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**WENDT REPLY TO OPPOSITION TO MOTION TO EXCLUDE OR LIMIT TESTIMONY OF FBI OR  
OTHER EXPERT WITNESSES TESTIFYING ABOUT CELL PHONE COMMUNICATIONS AND  
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## **TABLE OF CONTENTS**

I.	INTRODUCTION .....	1
II.	ARGUMENT AND AUTHORITIES.....	3
A.	The Government’s Argument That Cast Analysis Is ‘Routine’ Is Unresponsive to <i>FRE</i> 702 Objections in a Case in Which the Agent Did Not Employ Reliable and Verifiable Analysis and Methodology .....	3
B.	The Government Chooses Not to Argue Some Cases That Have Addressed Objections Involving Mapping .....	6
C.	In the Absence of Her Slides and Maps, Agent Sparano Stanger Has No Case-Specific Evidence to Present Other than to Discuss the General Basic Operation of a Cell Phone Network; the Government’s Arguments That Her Slides and Maps Are Unimportant to a <i>Daubert/F.R.E.</i> 403/ F.R.E. 702 Analysis Are Mistaken .....	9
D.	The Government’s Brief (Doc 1489) Does Not Overcome the Need for a Hearing, Especially Given That Through No Fault of the Government’s the Sparano III Slides as Part of Agent Sparano Stanger’s Testimony Were Not in the Hands of the Individual Defendants (Including Mr. Wendt’s) at the Time Initial Briefing on These Matters Was Submitted....	12
E.	The Government’s Failure to Produce Any Information about the Gladiator Forensics ESPA Software, its Mapping Operating Characteristics, and Error Rates Deprives the Court and the Parties of the Ability to Assess Whether Using it Amounts to a Reliable Methodology of Analysis .....	12
	CONCLUSION.....	15

**WENDT REPLY TO OPPOSITION TO MOTION TO EXCLUDE OR LIMIT TESTIMONY OF FBI OR  
OTHER EXPERT WITNESSES TESTIFYING ABOUT CELL PHONE COMMUNICATIONS AND  
LOCATIONS BASED ON HISTORICAL CELL CALL DETAIL RECORDS AND PROPRIETARY  
MAPPING SOFTWARE [DAUBERT AND F.R.E. 403]; MOTION FOR EVIDENTIARY HEARING**

1       **I. INTRODUCTION**

2       This reply to the Government's Opposition [Doc 1489] underscores that the  
 3 centerpiece of Agent Sparano Stanger's proposed expert opinion testimony is to  
 4 synthesize and essentially argue the Government's theory of the planning of Joel Silva's  
 5 killing and the implementation of that plan.<sup>1</sup> The Government's Opposition attempts to  
 6 sidestep this central issue<sup>2</sup> But the Agent's Declaration of August 12, 2020 (Doc  
 7 1490-1, at p. 7) makes it clear that her "report" is intended to "...depict [...] the cellular  
 8 activity of the phone numbers of interest relative to significant times and locations of the  
 9 suspected homicide." At the same time, the Government tacitly concedes by relying on  
 10 *United States v. Hill*, 818 F.3d 289, 296-7 (7th Cir., 2016) [referenced in Doc 1489  
 11 beginning at p. 7] that the inquiry here "...fits easily into the category of expert  
 12 testimony, such that Rule 702 governs its admission." And clearly, the concern here is  
 13 not the basic theory of radio transmission—it is the methodology used to arrive at the  
 14 case specific opinions, and arguments, that are proposed be *displayed* to the jury.

15       Knowing that it wants to avoid inquiry into the reliability and admissibility of  
 16 Agent Sparano Stanger's Gladiator Forensics based ESPA mapping analysis, the  
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18       <sup>1</sup> The December 18, 2020 slides proffered to the defense will be referred to here as Sparano III. The defense  
 19 will be asking permission to lodge all 3 presentations with the Court—the Government purports to prohibit the  
 20 copying of the Sparano Stanger slides—because the evolution of the slide shows demonstrates the Government's  
 21 purpose in calling the Agent. The Court will note that the last of these, dated December 18, 2020, is the longest of  
 22 the three and involves a wider ranging analysis of phones than the previous ones. Defense counsel did not actually  
 23 obtain Sparano III until February 13, 2021, notwithstanding the fact that it had been initially delivered to the defense  
 24 through discovery coordinators in early January 2021. The delivery problem is mentioned here in part because at  
 25 the time the Wendt defense made its initial motion on these issues (January 29, 2021), undersigned counsel  
 26 assumed, wrongly as it happens, that the Government would be proceeding with Sparano II. The expanded analysis  
 27 of Sparano III is relevant to the objections only in that it underscores the nature of the analysis undertaken in this  
 28 case – a retrospective analysis of approximate locations of multiple cell phones six years or so before the completion  
 of the mapping analysis being offered.

2       <sup>2</sup> The defense has argued [Docs 1444 and 1445] that Agent Sparano Stanger is not qualified to address the  
 basis for or reliability of her retrospective mapping processes which are inextricably intertwined aspect of her  
 testimony; there are authentication issues with the use of ESPA software in the current context; Agent Sparano  
 Stanger's opinions are not based on reliable or admissible methodologies insofar as her opinions are tied mainly to  
 the creation of maps (in the absence of drive testing). The defense also argued that Agent Sparano Stanger's  
 analyses are dependent on hearsay and on foundational information about the relevance of the target phones; the  
 opinion testimony illustrated and tied as it is to PowerPoints that are filled with synthesis and argument that create a  
 substantial danger of unfair prejudice, confusion, or misleading the jury within the meaning of F.R.E. 403.

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 OTHER EXPERT WITNESSES TESTIFYING ABOUT CELL PHONE COMMUNICATIONS AND  
 LOCATIONS BASED ON HISTORICAL CELL CALL DETAIL RECORDS AND PROPRIETARY  
 MAPPING SOFTWARE [DAUBERT AND F.R.E. 403]; MOTION FOR EVIDENTIARY HEARING**

1 Government argues its position by referencing cell phone related rulings which did not  
 2 involve the issues presented in this case. Only one of the cited cases involved a  
 3 retrospective analysis of multiple phones, multiple days, multiple geographical locations,  
 4 and objections to the resulting mapping methodology combined. On the subject of  
 5 objections to mapping, the Government avoided orders that discuss the need to avoid  
 6 synthesis, argument, and “overselling” (to quote one of the pertinent cases, discussed  
 7 below). Several of the rulings cited that address reliability of historical CDR analysis  
 8 opinions involved CAST Agents who relied in part on drive testing in their analysis.<sup>3</sup> As  
 9 the District Court explained in *U.S. v. Morgan*, 292 F.Supp.3d 475 (D.D.C, 2018):

10       “Only a drive test can measure the dominant signal; without a drive test  
 11 the most CAST members can do is measure a tower’s possible signal  
 12 area represented by a wedge that shows the direction that a tower’s  
 13 signal pushes out towards. [Citation to the record omitted.] By  
 14 comparing CDRs to the output from a drive test, CAST agents aim to  
 15 approximate a cell phone user’s possible, not exact, location when he  
 16 initiated a call. [Citations to the record omitted.]” *Id.*, at 481-82.

17       It is also the ruling in *Morgan* that explains in pertinent part, “*ESPA’s algorithm is*  
 18 *proprietary so CAST cannot evaluate the algorithm’s accuracy outside the quality checks*  
 19 *that Gladiator performs on CAST’s equipment.* [Citations to the record omitted.]” *Id.*, at  
 20 479-80, fn.3 [emphasis supplied]. This observation is the subject of objections in this  
 21 case, though apparently not in *Morgan*. The Government does not address this matter or  
 22 the related objections at all. Its response is to indicate that CAST unit experts have been  
 23 allowed to testify in other matters. It fails to address the substance of objections as to  
 24 Agent Sparano Stanger’s qualifications; failure to disclose bases (especially related to  
 25 Gladiator software); authentication of evidence; unreliability of methodology; misleading  
 26 opinions and related slides; reiteration of hearsay; and F.R.E. 403 objections.

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27       <sup>3</sup> A local example of this was Judge Gonzalez Rogers’ analysis in *U.S. v. Cervantes*, Case No. 12-CR-792-  
 28 YGR, 2015 U.S.Dist. 127048; 2015 WL 5569276 (N.D.Cal, September 25, 2015), which, as argued in the initial  
 brief, was a case in which the focus was on one phone, in one East Bay general location, on a specified day, in a  
 case in which the bases for the opinion included drive tests conducted along a reported route of travel.

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1           The Government is trying to persuade the Court not to hold a hearing. The Court  
 2 and defense have no greater information about ESPA-related methodology central to the  
 3 Sparano Stanger work now than they did before the defense's repeated requests for  
 4 information about it. The defense has made an objection to the proffer of an unverifiable  
 5 methodology on which the Government has the burden.

6           The bottom line is that the Government is tendering the proposed testimony of an  
 7 FBI Agent to present a jury with a synthesizing argument in a series of 60 recently  
 8 disclosed slides that make up what is now Sparano III (dated December 18, 2020). Agent  
 9 Sparano Stanger used a methodology in this case that is not on all fours with the  
 10 approaches used by CAST Agents whose historical analysis of cell records (CDRs) had  
 11 been augmented by drive testing and the use of a specific computer package and software  
 12 that is used during drive testing processes (as occurred both in *Cervantes, supra*, and in  
 13 *Morgan, supra*). Especially in view of the content of Sparano III, the defense is objecting  
 14 that the Government's disclosures to date, including Agent Sparano Stanger's August  
 15 2020 declaration, which is on file with the Court [Doc 1490-1] and the Government's  
 16 Exhibit B to Doc 1489 [the December 18, 2020, 60 pp. of slides/maps], is insufficient to  
 17 foreclose the need for an evidentiary hearing in this case.<sup>4</sup>

18           **II. ARGUMENT AND AUTHORITIES**

19           **A. The Government's Argument That Cast Analysis Is 'Routine' Is**  
 20           **Unresponsive to FRE 702 Objections in a Case in Which the Agent Did**  
 21           **Not Employ Reliable and Verifiable Analysis and Methodology**

22           The Government's opening salvo here, as it has been in prior arguments about the  
 23 sufficiency of CAST disclosures and discovery, is that cell phone analysis is routine and  
 24

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25           <sup>4</sup> Agent Sparano Stanger's August 12, 2020 declaration was filed first before Judge Beeler and then before  
 26 this Court as Doc 1396-4 as an Opposition to the defense CAST discovery appeal/Rule 59(a) motion. Agent  
 27 Sparano Stanger's declaration is numbered EXPERT 2097-2102 and is also appended to the Opposition as Doc  
 28 1490-1. As to the extent of her description of her process of mapping, she stated: "As part of creating the report, I  
 imported the CDRs and tower information into a mapping program to obtain a visual depiction of the tower  
 locations accessed by each target phone number during relevant times to the crime. No drive test was performed in  
 this case." Doc 1490-1, at p.7, para 13.

1 that the FBI's CAST team members have routinely been accepted as experts. (Doc 1489  
 2 at page 7.) First, the defense's arguments in this case (Docs 1444 and 1445) are far more  
 3 wide-ranging and case specific than those objections raised in other cases that are being  
 4 cited to the Court by the Government. It is correct for the Government to argue, as had  
 5 the Wendt defense in its initial pleadings, that there are courts that have admitted FBI  
 6 CAST unit Agent testimony about cell phone evidence under specified circumstances.  
 7 Second, however, it remains important to consider that: "No federal court of appeals has  
 8 yet said authoritatively that historical cell-site analysis is admissible to prove the location  
 9 of a cell phone user." *United States v. Hill, supra* 818 F.3d 289, 296. The fact that the  
 10 FBI worked on a case does not circumvent or satisfy F.R.E. 702.

11 In *Hill*, the Circuit Court upheld the admission of an analysis of one defendant's  
 12 cell phone records retrospectively reviewed for a location connected to *one cell phone*  
*tower near one specific Bank that was the crime scene in that case. Id.*, at 297-98. And  
 14 part of the reason that the records were used "...involved proving where [the defendant]  
 15 was not, rather than where he was, [as a result] this use is uncontroversial." *Id.*, at 298-  
 16 99. Mapping methodology was not an issue of significance in *Hill*. Here, the  
 17 Government is tendering: a retrospective analysis going back six years, on networks in at  
 18 least three different parts of the country, by a CAST Agent who did not survey or drive  
 19 test the network(s) at issue and is not relying on historical drive testing of the networks in  
 20 question. There are also multiple handsets and tower locations involved. And there is no  
 21 cell phone company network optimization or localization data available (the NELOS data  
 22 referenced in the pleadings).

23 The truncated analytical procedure has resulted in mapping produced without a  
 24 methodological description – or even a description of the Gladiator ESPN version used.  
 25 There is *no way of verifying adherence to Gladiator methodology* or reliability of the  
 26 methodology. And there are syntheses and link analyses contained on the face of the  
 27  
 28

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1 proposed slides (Exhibit B) that are essentially arguing the Government's case.<sup>5</sup>

2 As a result of these several factual variables, citations from the Government's  
3 brief (Doc 1489, at pages 7-8) have limited instructive utility beginning with *United*  
4 *States v. Hitesman*, Case No. 14-CR-00010-LHK, 2016 U.S.Dist. 84775, 2016 WL  
5 35238454 (N.D.Cal, 2016), which involved approving of the testimony of interpretation  
6 of call detail records on a specific day of a specific robbery, involving one general  
7 geographical location. *Id.*, at \*22-24.<sup>6</sup>

8 In *United States v. Cervantes*, Case No. 12-CR-00792-YGR, 2015 U.S.Dist.  
9 127048, 2015 WL 5569276 (N.D.Cal, September 25, 2015), CAST Agents testified about  
10 the general location of one phone based on a combination of review of CDRs and test  
11 driving in which testifying Agents used drive testing specific computer software to  
12 confirm road and tower locations and coverage extending to the road during a test drive  
13 and mapped accordingly. The drive testing was necessary because as in this case, the  
14 Government's theory was that some calls were made from a vehicle on a road. There  
15 was no objection about the facial content of the maps in either case, as there is here.

16 *United States v. Johnson*, Case No. 14-CR-412-TEH, 2015 U.S.Dist. 111921,  
17 2015 WL 5012949 (N.D.Cal, August 24, 2015), involved an 'analysis' of one phone  
18 detected near a specific address on Missouri Street in a case in which the focus was on  
19 one specific defendant involved in one particular episode. *Id.*, at \*18-19. There was no  
20 objection to the content of slides or maps and no discussion of these.

21 The Government's repeated citation (this is the second or third time the  
22 Government has made reference to this Order) to Judge Orrick's Order in *United States v.*  
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25 <sup>5</sup> As explained above, of necessity, the defense's objections to Sparano III, the slides dated December 18,  
26 2020, are more specific and 'new.' They are 'new' because undersigned defense counsel did not have access to the  
27 actual slides until February 13, 2021, instead of around January 5, 2021, which is apparently when the Government  
delivered them for dissemination to defense counsel. The nature of the slides that the Government currently intends  
on using makes them more objectionable than those initially proffered for Agent Sparano Stanger's proposed  
testimony.

28 <sup>6</sup> Opposition, Doc 1489, at pp. 8-9.

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1      *Williams*, Case No. 13-CR-0764-WHO, ECF #836 (N.D.Cal, January 27, 2016), is  
 2 especially useless as a guide here. Judge Orrick's ruling on the admissibility of FBI  
 3 CAST Agent discovery is one paragraph long and involved a situation in which the Judge  
 4 made it clear that: "The disclosure of his opinions is adequate. The defendants, while  
 5 having their own experts, *did not attack his methodology.*" *Id.*, at page 4 [emphasis  
 6 supplied]. Equally uninformative is the citation to *United States v. Reynolds*, Case No.  
 7 12-CR-20843, 2013 WL 2480684 (E.D.Mich, June 10, 2013), a case in which there was  
 8 one phone, one defendant, and no mapping issues raised.

9      The Government's citation to *United States v. Fama*, Case No. 12-CR-186-WFK,  
 10 2012 U.S.Dist. LEXIS 174887, 2012 WL 6102700 (E.D.NY, December 10, 2012)<sup>7</sup>, is  
 11 particularly irrelevant to the analysis. There, the testimony was being offered by T-  
 12 Mobile and Metro PCS employees testifying as lay witnesses on the basis of their  
 13 personal knowledge of the operation of their systems. *Id.*, at \*7-8.

14     In other words, boiled down, the Government's arguments in this case have little  
 15 support from cited cases.

16     **B.     The Government Chooses Not to Argue Some Cases That Have  
 17                  Addressed Objections Involving Mapping**

18     In *United States v. Davis*, 2013 U.S.Dist. LEXIS 70371 (S.D.Fla, May 17, 2013),  
 19 the District Court initially heard a motion to exclude cell phone mapping evidence that  
 20 had been brought under *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993),  
 21 and denied it. It then heard a further objection was that the maps offered were not  
 22 produced at the appropriate scale. *Id.*, at \*5. The court viewed this second motion as a  
 23 motion for reconsideration. The District Court observed that the Agent who was being  
 24 called as an expert in that particular case had done "nothing but" cell phone analyses for  
 25 three years and using "...JDSU network optimization software and Gladiator  
 26 interpolation software, Agent Magnuson has surveyed networks and obtained and

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<sup>7</sup> Opposition, Doc 1489 at p. 8.

1 interpolated the information to show the actual radio-frequency footprints of the sectors.  
 2 [Citation to the record omitted.]” *Id.*, at \*13-16.<sup>8</sup> Further, the court found that:  
 3 “...Agent Magnuson testified that he has actually scientifically tested his methodology by  
 4 using the JDSU and Gladiator software to *physically map sectors and comparing those*  
 5 *actual sectors with Agent Magnuson’s estimated and that this testing has demonstrated*  
 6 *his sector estimates to be ‘very, very accurate.’*” *Id.*, at \*16 [emphasis supplied]. That  
 7 was the methodology used in that case to map the coverage areas – drive testing over a  
 8 period of time and then case specific analysis.

9 In this case, of course, we do not have an Agent present who claims to have  
 10 physically, by drive testing or other network optimization technology analysis, verified  
 11 data specific to the cell site coverage on the particular network, or retrospectively  
 12 estimated cell tower coverage based on prior field work and historical drive testing. A  
 13 reference to the actual ruling in *Davis* explains that the JDSU software that was being  
 14 referenced, and that Agent Magnuson had been certified in his “phone-based drive test  
 15 and network analysis (Gladiator) technology” – technology similar to that used as  
 16 verification of tower coverage in the above-cited *Cervantes* case. That level of  
 17 background work and verification was not done in this case.<sup>9</sup>

18 On this score, a review of *U.S. v. Morgan, supra*, 292 F.Supp.3d 475, is highly  
 19 instructive. There, the analysis was more ambitious than in many of the cases cited by  
 20 the Government. The concern in *Morgan* did only relate to one individual, but for a  
 21 longer period of time than one or two days. And there, the Government called a CAST  
 22 Agent who was with the unit from the time of its formation to explain the methodology  
 23 employed. *Id.*, at 478-79. As the *Morgan* ruling explains, that case involved drive  
 24 testing “[with] mobile computing system that scans the area driven by an agent,

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25  
 26       <sup>8</sup> One example of JDSU type network optimization technology is used in drive testing, as happened in the  
 27 *Cervantes, supra*, case.

28       <sup>9</sup> In *Davis*, the Federal court also clearly was of the view that Agent Magnuson was qualified given what he  
 had testified to. 2013 U.S.Dist. LEXIS 70371 at \*10-15.

1 collecting the possible coverage area of towers that an agent specifically noted in the  
 2 system beforehand as well as surrounding towers' coverage areas. [Citations omitted.]”  
 3 *Id.*, at 480-81. In that instance, the testifying CAST Agent “...testified that currently,  
 4 *drive test technology provides the best available verification of a tower's estimated*  
 5 *coverage area.* [Citations to the record omitted.]” *Id.*, at 481-82. [emphasis supplied] .  
 6 Thereafter, a second agent undertook a peer review with “...all the drive test data and any  
 7 other information the initial agent had, including CDRs. [Citations to the record  
 8 omitted]. This agent also cross-checks the data by referencing different software  
 9 programs and other collections of data. [Citation to the record omitted.]” *Id.*, at 482-83.

10 The court explained:

11       Only a drive test can measure the dominant signal; without a drive test  
 12 the most CAST members can do is measure a tower's possible signal  
 13 area represented by a wedge that shows the direction that a tower's  
 14 signal pushes towards. [Citations to the record omitted.]

15 *Id.*, at 481-82.

16       In *Morgan*, the District Court conducted a hearing and took testimony. The  
 17 testimony allowed examination of the methodology that a CAST Agent used to produce  
 18 mapping. The analysis was less complex than the one here. The argumentative or  
 19 potentially misleading nature of entries on the maps and slides used by the testifying  
 20 agent was not an issue raised in the case.

21       It might be noted, given the digressive critique by the Government of Mr. Wendt's  
 22 reference to various publications about cell phone related forensic analysis that Judge  
 23 Huvelle, who wrote the *Morgan* ruling (292 F.Supp.3d 475), cites Larry Daniel. *Id.*, at  
 24 478-79. So did the Wendt defense. This same Larry Daniel, in the book cited in the  
 25 published *Morgan* ruling, wrote: “Any map created by an expert or analyst should be  
 26 based on known factors and should not lead the jury to believe that the expert knows  
 27 more than is possible from a set of call detail records.”<sup>10</sup>.

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28 <sup>10</sup> Larry Daniel, *Cell Phone Location Evidence For Legal Professionals* (2017), pp. 56-57.

1           The Government's critique of the defense's citation to Aaron Blank's article is no  
 2 less underwhelming since the article submitted by the Wendt defense was cited by the  
 3 Seventh Circuit in *United States v. Hill, supra*, 818 F.3d at 295, and was also cited in  
 4 (among other places) one of the early District Court rulings on the admissibility of cell  
 5 phone evidence, *U.S. v. Evans*, 892 F.Supp.2d 949, 952-53 (N.D.Ill, 2012). It would  
 6 seem slightly regrettable if it was considered inappropriate for a party to cite literature  
 7 relied on by courts in their decisions.<sup>11</sup> Clearly the Government's Opposition was not  
 8 attentive to the actual analysis of the various cases cited.

9           **C. In the Absence of Her Slides and Maps, Agent Sparano Stanger Has  
 10 No Case-Specific Evidence to Present Other than to Discuss the  
 11 General Basic Operation of a Cell Phone Network; the Government's  
 12 Arguments That Her Slides and Maps Are Unimportant to a  
 13 Daubert/F.R.E. 403/F.R.E. 702 Analysis Are Mistaken**

14           As just demonstrated, the Government is selective in its citation to and  
 15 consideration of the analysis used in the published and unpublished rulings on cell phone  
 16 related evidence. It is not surprising that the Government tries to separate Agent Sparano  
 17 Stanger's training and experience as a CAST team Agent from the report of her opinions  
 18 which she explains are part of her case specific analysis. The argument, reiterated several  
 19 times in the Government's brief (Doc 1489) is fatuous. It is undermined by Agent  
 20 Sparano Stanger's declaration (Doc 1396-4; also 1490-1) which explains the following in  
 pertinent part:

21           I then analyzed the records and compiled a report, which depicted the  
 22 cellular activity of the phone numbers of interest relative to significant  
 23 times and locations of the suspected homicide. **As part of creating the  
 24 report, I imported the CDRs and tower information into a mapping  
 25 program to obtain a visual depiction of the tower locations accessed**

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26           <sup>11</sup> The Government's critique is in the Opposition, ECF Doc 1489, p.11, fn.4. The defense is attaching the  
 27 biographical statement of one of Larry Metcalf's books on cellphone investigations to demonstrate why Mr. Metcalf  
 28 was referenced as a 'prosecutor'. That's the way his book identifies him. The Government apparently does not read  
 his work.

1                   **by each target phone number during relevant times to the crime.<sup>12</sup>**

2                   Notwithstanding what its witness signed off on in her declaration, the Government  
 3                   argues that Agent Sparano Stanger's proposed testimony "...concerns cellular technology  
 4                   and records, and specifically that a cell phone will connect to the tower with the strongest  
 5                   and best quality signal and thus CDRs, which show which tower the phone  
 6                   communicated with, will provide the approximate location of the cell phone at the time  
 7                   the record was generated." (Doc 1489, at 14:26-15:3.) If that was all that the  
 8                   Government wanted out of Agent Sparano Stanger, there is no need for her to have  
 9                   explained, under penalty of perjury, that she prepared a report and that "[a]s part of  
 10                  creating the report, I imported the CDRs and tower information into a mapping program  
 11                  to obtain a visual depiction of the tower locations accessed by each target phone...."<sup>13</sup>  
 12                  Indeed, in a backhanded and indirect way of acknowledging this reality in its pleading,  
 13                  the Government explains that her opinion about cell phone operation will be the  
 14                  "*...opinion with respect to all of the relevant CDRs in this case around the time of Joel*  
 15                  *Silva's murder.*" [Doc 1489, at 15:3-4.] [Emphasis supplied.]

16                  The doubletalk aside, the Government wants case-specific opinions, and if the  
 17                  current objections are overruled, the Sparano Stanger slides and PowerPoints will be  
 18                  what is shown to the jury as representing the opinions pertinent to the analysis that the  
 19                  Government relies on. The Government's argument that the slides, maps, and displays  
 20                  are not part of the Sparano Stanger opinions and proposed testimony (Doc 1489, Section  
 21                  B, beginning at p. 14) does not square with reality. The Government's argument cannot  
 22                  be credited, since to do so is to ignore what the proffered witness explains as her  
 23                  methodology. The Government has the burden to show that the Agent's opinions are  
 24                  admissible under F.R.E. 702.

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 26  
 27                  <sup>12</sup> From Agent Sparano Stanger's report, paragraph 13, Doc 1396-4, at page 7. This is a partial quotation of  
 the entire paragraph. Emphasis supplied.

28                  <sup>13</sup> Agent Sparano Stanger's 8-12-20 declaration, Doc 1396-4, at page 9.

1           And that is part of the reason that the defense has made reference to Judge  
 2 Crenshaw's ruling in *United States v. Frazier*, 442 F.Supp.3d 1012 (M.D.Tenn, 2020).  
 3 True, in that case, the District Court ruled that it would allow the testimony, assuming  
 4 there was attention to "...the potential for overselling..." as contained in the illustrations  
 5 and maps being offered. *Id.*, at 1025-26. There is no indication of the nature of the  
 6 objections that the defense raised to the slide show in that case. The court there  
 7 explained in passing that the slide show "contains testimonial statements, inferences, and  
 8 conclusions." *Ibid.* It also:

9           ...contains pictures of different cell phone towers and specific 'cell  
 10 sector examples,' without any indication of whether these are  
 11 representative of the ones the cell phones allegedly used in this case.  
 12 Additionally, the slide show contains numerous graphs depicting the  
 13 specific locations of cell phones in proximity to certain alleged specific  
 14 places of interest, without any indication of the variables and limitations  
 15 inherent in the historical cell phone analysis methodology. *Just as the*  
*Government cannot oversell the methodology through testimony, it*  
*cannot oversell the methodology through the introduction of evidence.*  
 16 [Footnote omitted.]

17 *Id.*, at 1025-26. [Emphasis supplied.]

18           The Government's proffer of Agent Sparano Stanger's testimony is tied to the  
 19 slides/maps that she prepared. The slides, to borrow from the above ruling, clearly  
 20 'oversell' what the Government should be able to elicit from the Agent, given the facts  
 21 here. The Wendt defense has demonstrated that while there have been cases litigated  
 22 recently in which District Judges have been willing to admit maps, those cases tended to  
 23 be those in which the analysis was simple, and the relative accuracy and reliability of the  
 24 mapping had been the subject of drive testing analysis. See, for example, *U.S. v.*  
*Morgan, supra*, 292 F.Supp.3d 475, where the court made reference to the limitations of  
 25 maps arrived at through drive testing, explaining that the Government in that case  
 26 conceded that "...those maps cannot pinpoint defendant's exact location at any time."

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 28           **WENDT REPLY TO OPPOSITION TO MOTION TO EXCLUDE OR LIMIT TESTIMONY OF FBI OR  
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1       *Id.*, at 486-87.<sup>14</sup>

2

3           **D.     The Government's Brief (Doc 1489) Does Not Overcome the Need for a**  

4           **Hearing, Especially Given That Through No Fault of the**  

5           **Government's the Sparano III Slides as Part of Agent Sparano**  

6           **Stanger's Testimony Were Not in the Hands of the Individual Defendants**  

7           **(Including Mr. Wendt's) at the Time Initial Briefing on These Matters**  

8           **Was Submitted**

9       Under the circumstances presented here, and given the Government's ambitions in  

10      this case, the law does not support this Court's deciding that there should be no  

11      evidentiary hearing on the admissibility of Agent Sparano Stanger's testimony – founded  

12      as it is, and aided by, her slides and maps. What the defense is calling 'Sparano III' is the  

13      array of slides contained in sealed Government Exhibit B, the December 18, 2020, 60  

14      pages of slides, some containing excepts from spreadsheets, and most containing specific  

15      notations about phone numbers, calls and texts. The pages also, in certain places, contain  

16      notations that appear to place phones in given locations.

17       None of the slides contain any cautionary language, or statement of limitations as  

18      suggested in *Morgan*. Many of the slides contain synthesis and argument, as well as  

19      indications of the location of target phones.

20

21           **E.     The Government's Failure to Produce Any Information about the**  

22           **Gladiator Forensics ESPA Software, its Mapping Operating**  

23           **Characteristics, and Error Rates Deprives the Court and the Parties of**  

24           **the Ability to Assess Whether Using it Amounts to a Reliable**  

25           **Methodology of Analysis**

26

27

28       In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the court  

29      explained that one criterion for admissibility of science-based evidence is to assess  

30      whether an expert has applied a theory or technique that "...can be (and has been)  

31      tested...." *Id.*, at 593-94. This is one of the court's descriptions of the way a

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14 Here, of course, the Government has made no concession of that kind, and further, its expert has indicated no limitations at all on her maps, slides, and illustrations.

1 methodology can be demonstrated to be empirically based, with known and defined  
 2 standards that control the technique's operation. *Id.*, at 593-94. This is part of what  
 3 allows the technique, among other things, to be described in terms of known error rates  
 4 and also the potential for replication. *Id.* In *Kumho Tire Co. v. Carmichael*, 526 U.S.  
 5 137 (1999), the court explained that while trial courts can apply the *Daubert* criteria with  
 6 flexibility, there will be endeavors, like engineering, that involve scientific foundations.  
 7 *Id.*, at 147-51. While the trial court can focus its reliability inquiry as needed given the  
 8 expertise involved, particularly where aspects of science are tied into a technological  
 9 endeavor, consideration of the specific *Daubert* factors, including testing, peer review,  
 10 error rates, and the like make sense. *Kumho*, at 141-42, referencing *Daubert*, *supra*, 509  
 11 U.S. at 593-94.

12 Notwithstanding multiple attempts by the defense to actually obtain information  
 13 about the software that Agent Sparano Stanger used – including obtaining the specific  
 14 nomenclature or description of the version of the software; the manual; validation studies,  
 15 etc. – none was obtained. The defense was asking for information that would permit a  
 16 review of the extent to which the Agent correctly applied the technology based  
 17 methodology to the information pertinent to this case. As the court explained it in  
 18 *General Electric Co. v. Joiner*, 522 U.S. 136, 144 (1997), the expert must account for the  
 19 ‘how and why’ he or she reached the challenged opinion.<sup>15</sup> That part of the F.R.E. 702  
 20 inquiry cannot be performed with the ability to actually get a disclosure of the Gladiator  
 21 Forensic ESPA information. What is left is essentially “opinion evidence that is  
 22 connected to existing data by the *ipse dixit* of the expert.” *General Electric*, 512 U.S. at  
 23 146-47. As has been made clear, “...an experiment or analysis should be described in  
 24 sufficient detail that other scientists with sufficient skills and means can follow the steps  
 25 described in published work and obtain the same results within the margins of

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 27 \_\_\_\_\_  
 28 <sup>15</sup> The language quoted is from Berger, “The Admissibility of Expert Testimony” at page 18 of the Federal  
 Judicial Center’s *Reference Manual on Scientific Evidence* (3rd Ed.), citing *Joiner*.

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experimental error.”<sup>16</sup>

In 2016, the President’s Council of Advisors on Science and Technology (PCAST) released a report on feature comparison methods in the forensic sciences. One of the issues that the report addresses, among other things, was the use of algorithms in technologies that are used in forensic science processes – like DNA analysis, which the PCAST report noted “still require scientific scrutiny” are scientifically valid and reliable and “...whether the software correctly implements the methods.”<sup>17</sup> This discussion was referenced by the District Court in *U.S. v. Gissantaner*, 417 F.Supp.3d 857, 869-70 (W.D.Mich, 2019) – where the court noted the question with software driven analyses is whether the software correctly implements the methods. The PCAST report recommended that an appropriate evaluation of the performance of a given software should be studied by groups that are not associated with the software developers. *Id.*, at 870-71 (quoting from the PCAST report).

14 The use of algorithms in software is associated with a number of matters that arise  
15 in courts, many of which are subject to ongoing debate: algorithmic risk assessment;  
16 algorithm based firearm identification; software based fingerprint identification; software  
17 based subject identification, etc.<sup>18</sup> As explained in the District Court's ruling in *U.S. v.*

<sup>16</sup> Plesser, “Reproducibility v. Replicability: A Brief History of a Confused Terminology,” 11 FRONT. NEUROINFORM. (2017), published online on January 18, 2018. See also National Academy of Sciences, et al., *Reproducibility and Replicability in Science*, National Academies Press (2019), “Reproducibility and Replicability in Science defines reproducibility and replicability and examines the factors that may lead to non-reproducibility and non-replicability in research.” [From excerpt of the book from the National Academy of Sciences, published as a result of a Congressional request to the National Academies of Sciences, Engineering, and Medicine.

<sup>17</sup> PCAST report at page 21.

<sup>18</sup> The Wendt defense is offering as an exhibit excerpts from the webpage of the Center for Statistics and Applications in Forensic Evidence, a consortium funded in part by the National Institute of Standards in Technology, which has funded research in the forensic sciences since the various Scientific Working Groups funded by the National Institute of Justice. One of the issues being worked on at CSAFE is the fairness of algorithms used in forensic science in laboratories and elsewhere. Appended as Exhibit C, the Court will find excerpts from CSAFE's research on Statistical Modeling of Digital Event Data, one project of which involves "Statistical Methods for the Forensic Analysis of Geolocated Event Data." Appropriately, given the objections stated here, the fact that the major scientific working group working on statistical evidence, including algorithms in forensic science, is looking into geolocation data analysis tells the Court that a lack of disclosure means a lack of verifiability. See Exhibit C, excerpt from CSAFE website.

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1 *Morgan*, 292 F.Supp.3d 475, 479-80: “ESPA’s algorithm is proprietary, so CAST cannot  
2 evaluate the algorithm’s accuracy outside the quality checks that Gladiator performs on  
3 CAST’s equipment. [Citations to the record omitted.]” *Id.*, at 479-80, fn.3. Here, we  
4 have no indication of any such quality check.

5 In this case, the Government has not graced the defense (or the Court for that  
6 matter) with information about the relationship between Gladiator Forensics and the work  
7 done by the FBI’s CAST unit in general, and by Agent Sparano Stanger in this particular  
8 case. Especially in view of the fact that the defense repeatedly sought pertinent discovery  
9 under Rule 16(a)(1)(F) and (G), and now is briefing its objections to the reliability of the  
10 Agent’s opinions, at this point the only thing the defense can go on is what has been  
11 published about ESPN in existing court rulings. Otherwise, the evidence is behind a  
12 curtain that allows no inquiry into process until this Court steps in.

13 The Government’s argument that it is up to the defense to go out and verify Agent  
14 Sparano Stanger’s work is not a serious one here, given the burden of proof incumbent on  
15 the Government under F.R.E. 702. Clearly, without a hearing to address the issue just  
16 discussed here, the Court cannot knowledgeably rule on the objections, unless it is  
17 inclined to grant them given the paucity of transparency and verifiability.

18 **CONCLUSION**

19 For the reasons stated here and in the underlying motion, and following an  
20 evidentiary hearing, the evidence should be excluded.

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1 Dated: February 22, 2021

Respectfully Submitted,  
JOHN T. PHILIPSborn  
MARTIN ANTONIO SABELLI

4 /s/ John T. Philipsborn  
5 JOHN T. PHILIPSborn

6 /s/ Martín A. Sabelli  
7 MARTIN A. SABELLI  
8 Attorneys for Brian Wayne Wendt

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## **PROOF OF SERVICE**

I, Melissa Stern, declare:

That I am over the age of 18, employed in the County of San Francisco, California, and not a party to the within action; my business address is Suite 350, 507 Polk Street, San Francisco, California 94102.

On February 22, 2021, I served the within document entitled:

**WENDT MOTION FOR EXTENSION OF TIME TO FILE REPLY TO  
GOVERNMENT OPPOSITION (DOC 1489) TO WENDT MOTION TO  
EXCLUDE OR LIMIT THE TESTIMONY OF FBI OR OTHER  
WITNESSES TESTIFYING ABOUT CELL PHONE COMMUNICATIONS  
AND LOCATIONS, ETC. (DOC 1444)**

- ( ) By placing a true copy thereof enclosed in a sealed envelope with postage thereon fully prepaid, in the United States Mail at San Francisco, CA, addressed as set forth below;
- (X) By electronically transmitting a true copy thereof through the Court's ECF system;
- ( ) By having a messenger personally deliver a true copy thereof to the person and/or office of the person at the address set forth below.

AUSA Kevin Barry  
AUSA Ajay Krishnamurthy  
AUSA Lina Peng

All defense counsel through ECF

Executed this 22nd day of February, 2021, at San Francisco, California.

Signed: /s/ *Melissa Stern*  
Melissa Stern

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